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# Impact of Information and Communication Technology (Ict) On the Curriculum Upgradation and Career Aspiration of Students

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**Abstract:** *Information Technology encompasses a wide range of functionalities, including communication, processing, reservations, and multimedia. Information and communication technology (ICT) or information technology and communication (ITC) refers to the primary role that communication networks perform. Modern educational systems make extensive use of ICT (information and communication technology). Because of its adaptability and the potential to foster connections among students, ICT plays a significant role in advancing academic understanding. Student interest and attitude toward their future profession or occupation is linked to their aim for a specific vocation. For students, career desire is a combination of the ability to identify and create objectives for the future, as well as to be inspired in the present toward those goals. Indigenous students are looking at a variety of options for their futures in the digital era. In the ICT industry, new technologies are continually being launched. Social Network Manager, IT Architect, Knowledge Management and Web Specialist K. Venkata Lakshmi. "Role of ICT in Curriculum and Teacher Development." International Journal of Scientific Development and Research (IJS DR), 2016, vol.1, no.7, pp. 230-232 are just few of the new ICT roles created by new technology. There are still existing job titles like "Systems Analyst," "Project Manager," and "Programmer.*

**Keywords:** *Communication, Multimedia, Technology, ICT, Music Education, Blended Learning, Radio*

## 1. INTRODUCTION

Education is a means of preparing for a future career. Currently, in India, education is viewed as a means to an end, and students from all backgrounds seek for a profession and a sense of self-worth. The appropriate kind of assistance and coaching can help a student succeed in his or her profession; students can be productive if they self-assess their knowledge of job interests and aptitudes, as well as information about the working world and support services. To overcome social stratification in a very hierarchical Indian society, increasing the



aspirations of indigenous students, particularly their career ambitions, may be a viable option for tackling the problem. Technology plays a crucial role in disseminating information about a career.<sup>i</sup>

In this primer, ICT is described as "a broad range of technological tools and resources used to communicate and create, disseminate, store and manage information." Computers, the Internet, radio and television transmission, and telephone are all examples of these technologies. Even in education, ICT (Information and Communication Technology) is now widely used. Computer technology has become an integral part of education at every level, from elementary school to college. Learning a second language can be a rewarding experience when it's aided by the use of ICT. It's become a serious issue in education, and it's been employed from elementary school through university to help students and teachers alike in the teaching and learning process. Information and communication technologies (ICTs) have been hailed as major enablers of educational reform. When it comes to learning a new language, computers play a critical role.<sup>ii</sup>

The current stage in the evolution of civilization is characterised by the expanding role that information technology plays in every facet of our everyday life. The introduction of cutting-edge technology into the realm of education has made it feasible to make adjustments to not only the content but also the mode of presentation and the structure of educational programmes. The utilisation of information technology in educational settings has several objectives, including the enhancement of the quality of instruction and the participation of students in the process of learning and cognition, the enhancement of the ability to locate relevant information, the development of thinking activities, and the acquisition of expertise in the use of information and software products. One of the issues that comes with using information technology in education is making the switch from information technology to nontechnology. Computers are employed in teaching, monitoring, recognising, and regulating educational organisations.<sup>iii</sup>

## **2. RESEARCH OBJECTIVES**

- The main objective of the study is to explore the Importance of ICT in the curriculum of our schools.
- The study aims to explore the significance of ICT in teaching-learning process.
- The study aims to analyze the job orientation in the present world and the significance of ICT.

## **3. MATERIALS AND METHODS**

The mixed research method was used in this research. This study used an integrated literature survey, research approach to uncover key features of student career choices, the narrow definition of ICT, Gender and ICT.

Due to the study's potential to generate new theories on a topic like this one, which has had very few studies done on it, an exploratory research survey was used. Due to its role in explaining and creating the basic understanding of an issue, it was more suited for the study it is reported to be effective in less mature contexts. As a result of this study's



utilisation of a focused group, a panel of experts was recruited to provide the data for this study's analysis. Because it provided for greater design flexibility, the exploratory survey was an excellent choice for exploring various facets of the study's setting. Research models based on literature surveys, surveys of existing practises, and expert consultations were all possible since it allowed for the establishment of an expansive and flexible research model. ICT definition and job choice are examples of novel phenomena for which exploratory study can be valuable, given the emphasis is broad and significant difficulties have not yet been discovered.

## **4. RESULTS AND DISCUSSION**

### **4.1 What we understand from ICT**

Data collection, storage, retrieval, processing, analysis, and transmission are all examples of information and communication technology (ICT). Individuals and businesses may now do information-related jobs more quickly and more effectively, as well as launch new products, processes, and organisational structures thanks to advances in ICT. As a result of advances in ICT, organisations are now better equipped to develop, procure, test, implement, and maintain electronic systems that support their business objectives by capturing, storing, retrieving, transferring, communicating with one another and disseminating data in a variety of ways. Software and hardware acquisition, appraisal, procurement, bidding, leasing, licencing, and disposal are also included in this category of services.<sup>iv</sup>

ICTs, or information and communication technologies, are widely regarded as major potential levers for launching and sustaining education reform initiatives. In spite of the fact that ICTs are increasingly being used in education projects throughout the globe, there is a lack of explicit advice for policymakers and donor personnel on how to utilise ICTs to help nations fulfil the education-related Millennium Development Goals.

### **4.2 Future of ICT in Teaching Profession**

The function of interactive multimedia in an educational setting, whether that setting is the workplace, an educational institution, or just everyday life. In addition, information and communications technology (ICT) includes web TVs, net PCs, and web-based education, all of which make education more accessible, flexible, and inventive. It is very crucial for the Indian education system to have ICT integrated teacher education since India is devoted to maintaining its leadership position in the knowledge-based society as well as its global cooperation.<sup>v</sup>

In regard to education that is driven by information technology, Professor Ram Takwle has the following to say: "They are changing the methods of content development, content storage, content packaging, and content transmission, and as a result, offer a new paradigm of education." These multimedia programmes and packages have another purpose, which is to enhance the actual activities that take place in the classroom and to assist with their simple assimilation.

### **4.3 ICT - Teaching and Learning:**

The use of information and communications technology (ICT) in educational settings is just in its infancy stage, especially in less developed countries. The conception, organisation, and production of textbooks and other educational materials for use in schools are all ways in



which the role of technology in academic instruction and instruction more generally is reflected. NCERT, New Delhi's national body for educational research and training, has stepped forward to play a significant part in this monumental undertaking. Use and presentation of instructional aids are ICT's primary role in education. In recent years, the quality of instructional aids has improved. Some of the teaching materials that may be used range from a simple chart to something more complex like a three-dimensional model. The growth of electronic media has also contributed to the enhancement of instructional resources by providing a third dimension and mobility. Simulated programmes in the classroom allow students to experience real-world events without the risk, price, or time required to actually participate in them. They keep the user informed about the current state of the event and the available options. Reading is an acquired skill, and the most effective method for teaching reading is to do it within the context of real-world situations. When educational materials are written at a student's instructional level, the students are ecstatic consumers. A constant need for user input makes simulations very compelling. Simulating a real-world environment allows students to learn in a way that textbooks can't, as well as allowing students to practise their new skills in a way that mimics a real-world circumstance.

At this moment in time in history, the quantity of data that is being traded on the internet is really mind-boggling. Email and other forms of online communication like news groups and discussion forums were established so that people all over the globe could more easily share information over the World Wide Web (www). Internet browsers such as Netscape and Microsoft Internet Explorer make it possible for anyone with an interest in virtually anything to look up, view, and display information on the internet.

#### **4.4 Role of ICT in Curriculum and Teacher Development**

Technological advancements and the shifting demands on students and teachers mean that cutting-edge curricula and training are now essential for all parties involved. It is imperative that teachers have the proper training to administer a cutting edge ICT curriculum. When it comes to the introduction of an entirely different course of study, there is a lot that goes into it. For an ICT curriculum, additional considerations must be made. Teachers' professional development programmes are most effective if they are tailored to the level of ICT proficiency achieved by their students, according to educational research. Teacher development should be viewed as a continuing process, with a large number of professional development events taking place at institutions.<sup>vi</sup>

There is a limit to the extent to which any new subject can be brought into the college curriculum, especially if just the most basic facilities have been provided so far in any educational system. But the relevance of ICT to a country's future economic and commercial viability necessitates a high level of investment in the technology, teacher education, and support services needed to implement an ICT-based curriculum. Taking these resource constraints into consideration, the suggested curriculum provides minimum criteria for effective delivery in various situations. A system that utilises both information technology and other technologies that are closely connected to it, such as communication technology, is known as an ICT system.

#### **4.4 A Curriculum and Programme of Teacher Development**



A college's use of ICT is always going to be characterised by this. A school where the instructor is the primary source of information about the subject is embracing a teacher-centered ideology. In such a scenario, the teacher also has control over the students' use of ICT. However, in the context of a learner-centered mindset, content comes from various sources and students are responsible for designing their own projects. Students select ICT resources and technologies that best fit the goals of a project. Instructive and constructivist pedagogy are two terms used to describe these two divergent methods of teaching.

#### **4.5 Progressive Plans and Policies:**

Development strategies and policies are based on a college's vision and teaching methods. As these plans and policies progress through their many stages, aims and objectives are refined to include short-term as well as long-term outcomes. An evaluation plan and policies are established to guide ICT growth in a specific direction.

#### **4.6 Understanding the curriculum:**

ICT's growth in the curriculum is influenced by an understanding of the curriculum. How can pupils learn about the technology that is accessible and how it can be used in the beginning? Second, when students gain proficiency in the fundamentals of ICT, they begin to incorporate these technologies into their normal course work and projects. In the third place, as students' proficiency and self-confidence with ICT grow, they begin to combine the two, bringing the two together. Students are now able to deal with more sophisticated, real-world professional difficulties because to the application of ICT.

#### **4.7 Professional development of college staff:**

A college's faculty must also get ongoing training in addition to that provided to students. Teachers' personal and professional productivity is boosted by the usage of ICTs. Teachers and other staff members first learn about what technology is available and how it might be utilised. After acquiring the fundamental skills, educators can begin incorporating numerous IT technologies into their daily work and projects. Teachers and staff are increasingly integrating ICT into their lesson plans as their proficiency with the technology grows.

#### **4.8 Community involvement:**

Involvement in communities can come from a wide range of sources, including individuals' own households, their workplaces, the government, non-profits, faith-based institutions, and other educational institutions. Examples of community participation include the donation of money and equipment, as well as the provision of human resources for the purpose of training and providing technical help. As a college receives support from the surrounding community, it is able to return that support in a variety of ways. For example, a college may opt to open its computer labs to the public at night, or have students teach their parents how to use them. A college's use of ICT opens the door for its students and faculty to engage with people in their own communities as well as those around the world. There are a variety of ways in which organisations and schools can work together, from creating websites for neighbourhood groups to collaborating on joint initiatives.

#### **4.9 Teacher and ICT**



The role of the teacher in the classroom is changing as a result of the proper implementation of ICT. Using ICT as a source of knowledge, a medium for content transmission, and a means of interaction and dialogue, Jenkins (1999) claims that it transforms teaching and learning. Teachers are challenged by the role these technologies play in the classroom since they force them to rethink their methods. Teachers are increasingly taking on the roles of facilitators of learning, as well as facilitators of group work and managers of classroom events.<sup>vii</sup>

Teachers can no longer get by with just passing on information. In order to educate students for a world where no job is guaranteed for life and when people change occupations multiple times, it is vital that teachers foster critical thinking, information literacy, and collaborative working methods. It is possible for students and teachers from all over the world to interact, learn, and collaborate over the Internet. Education may now be provided to everyone, regardless of where they live, as long as they have access to the internet and a computer. Communication with other educators and the integration of teaching styles and materials across the curriculum are both possible.

#### **4.10 ICT: Essentialities in our career guidance programme**

Technology's function in career advising has evolved significantly over the past few decades. When computers first became widely available, the primary use of these technologies was to quickly and accurately administer and modify interest questionnaires. There is no need to limit the use of ICT in career advising just between students and machines, such as accessing data or taking an online personality test. Online therapy is only one example of how ICT may be used in a variety of ways. With the use of email, students can contact with a professional online. When both the client and the counsellor are located in different or remote locations, online career counselling is defined as individualised e-mail career counselling that incorporates professional career counselling and career planning services and uses electronic resources to communicate and deliver services.<sup>viii</sup>

We need to remember that ICT includes not just "information" but also "communication" technology. In many cases, the advantages of "communication" capabilities are overlooked. According to EU publications, "the use of current multimedia technologies and the Internet to enhance learning quality by facilitating access to resources and services, as well as remote exchanges and collaboration" is the definition of "e-Learning." It is essential to have access to resources on the professional world that can be found on the internet, to cooperate with professionals from a variety of sectors, and to share ideas with other students. It's possible that new ways of learning, such as "blearning," "blending," and "e-learning," might serve as a source of creativity for brand new guidance models.

The wide variety of job opportunities in the music industry, ranging from instrument production to music criticism, makes career counselling at conservatoires a difficult task. It's difficult to locate an instructor who's experienced and well-versed in all of the various fields in which a prospective professional musician would be interested. Because of this, we concluded that a successful career guidance project would necessitate the participation of professionals and institutions from a variety of fields. We hypothesised that information and communications technology (ICT) could serve as a bridge between the conservatoire and the



world of professional music. As a substitute for conservatoires' absence of a professional guidance counsellor, information and communication technology (ICT) can help experts and students collaborate more effectively. "Music in the professional world" was designed to help music students with their career planning and education. Students can use technology to communicate with professional musicians and explore music-related career alternatives in the course. Even more so when students have to select what questions to ask professionals, or even more so when they have to deal with the challenge of finding and contacting professional musicians on their own, choosing how to approach them, and determining what aims they should contact them about.

Students, teachers, and parents can all participate in the course's online activities from the convenience of their own homes or offices, saving time and money otherwise spent on travel and scheduling conflicts. Because of advances in information and communication technology (ICT), professionals no longer have to travel to attend class. We decided to include an online component in the course because the vast majority of professors and students at professional conservatoires in Spain have regular access to and use of the Internet. It's possible that the online portion of this course might be used by other educational institutions that desire to provide a course like this. One of the advantages of using online teaching tools is this:<sup>ix</sup>

In today's professional world, information and communication technologies are becoming increasingly vital. The music industry is no different. New means of music marketing, promotion, and distribution have emerged thanks to the Internet and the ingenuity of musicians. One of the best places to find out about career prospects is on the Internet. It is our goal to introduce students to the Internet as a valuable source of knowledge and as a tool for managing their professional lives by incorporating an online component into a music curriculum course.

#### **4.11 Policy Makers and ICT**

Keeping in view the above mentioned causes our respective School Boards have already introduced certain measures in this regard. For example the subject of Computer Science is being taught to the students almost after the Primary education. Keeping in view the needs of the society is imperative that the schools and the boards need to take certain concrete steps in this regard and ICT to be implemented properly.

### **5. CONCLUSION**

Students' professional outlooks can be developed most effectively through information technology-based learning and professional activities, according to the results of an experimental study. With the aforementioned in mind, we may conclude that students' professional self-identity can only be developed through the use of information technology in high school vocational instruction. In order to attain education for sustainable development, our research has focused on a topic that is both urgent and important: the use of ICT in curriculum development. The article has discussed the importance of ICT in today's world and how it would improve the quality of education in building curriculum for students.. Teachers, too, need to know how to use ICT in order to provide relevant training to students



in their field of study. Teacher function, according to Jenkins, is that of a facilitator or manager who helps students learn.

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Nil

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